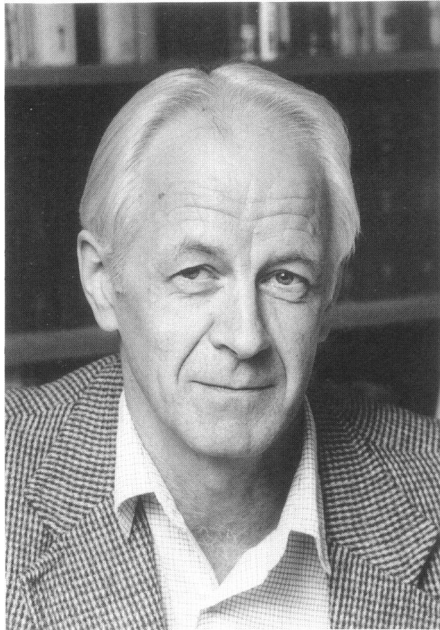


Allan C. Wilson (1934–91): In Memoriam



Allan C. Wilson (1934–91)

Allan C. Wilson, Professor of Biochemistry and Molecular Biology at the University of California at Berkeley, died at the age of 56 years on July 21, 1991, while undergoing treatment for leukemia. Allan Wilson revolutionized the study of evolution. The two themes of his work were to understand the process of evolution at the molecular level and to use molecular biology to learn who we were, how we have evolved, and why we are as we now are. Among Allan's major contributions were (1) the discovery, based on molecular evidence, that the last common ancestor of humans and African apes lived only about 5 million years ago, (2) the demonstration that the rate of molecular evolution is largely independent of the rate of morphological evolution, (3) the discovery that DNA can survive in and be characterized from ancient remains of extinct populations and species, and (4) the proposal that the mitochondrial lineages of all people trace back

to a common female ancestor who probably lived in Africa not much longer than 100,000 years ago. While undergoing chemotherapy, he was organizing an international collaboration to sample everybody.

Allan Wilson was first introduced to natural history while growing up on a New Zealand farm, then studied biochemistry at Otago University. His eagerness to integrate natural history and experimental biology led to a search for a mentor who would help him explore the molecular basis of biological diversity. He studied zoology at Washington State University; then came to UC Berkeley, where he earned his PhD in biochemistry with Arthur Pardee; and then worked as a postdoctoral fellow with Nathan Kaplan at Brandeis University, collecting scores of animal species for his first comparative studies of proteins and for his first efforts to study molecular evolution. Allan joined the faculty of the Department of Biochemistry (now Department of Molecular and Cell biology) at UC Berkeley in 1964. His collection of specimens came with him and increased manyfold.

In the 26 years that followed, Allan Wilson's lab was home to more than 100 undergraduates, graduate students, postdoctoral fellows, and sabbatical visitors from six continents. Members of the "Wilson lab" came from the fields of genetics, anthropology, biochemistry, botany, criminalistics, microbiology, molecular biology, statistics, and zoology. Working with Allan Wilson, 17 women and 17 men completed their doctoral degrees. His weekly group meetings and his graduate course in molecular evolution became gathering places for faculty, postdoctoral fellows, students, and visitors to argue over the newest controversies. Allan and his group published more than 300 papers, some of which incited considerable controversy. Maintaining calm and a sense of humor in the face of vitriolic attack from the outside world was an essential lesson of life in the Wilson laboratory.

Allan was extremely humble in accepting personal recognition for his achievements, instead crediting his students and research colleagues. Among the awards that came his way nonetheless were elections to the Royal Society of London, to the American Academy of Arts and Sciences, and as University of California Faculty Research Lecturer; an honorary degree from

Otago University; two Guggenheim Fellowships; the 3M Life Sciences Award from FASEB; and the MacArthur Prize.

Although what it meant to work with Allan Wilson is hard for even his close friends to express exactly, we believe that the insistence on one's right to think creatively, beyond the usual disciplinary bounds, coupled with devotion to carefully collected data, at least in part defined his thinking and teaching. The all-too-brief but extraordinary flourishing of the Wilson labo-

ratory is perhaps best explained as the result of Allan's loyalty—to his students, to scientific evidence, and to the often maniacal but always rigorous whimsy that comes from shared freedom of thought.

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